product data

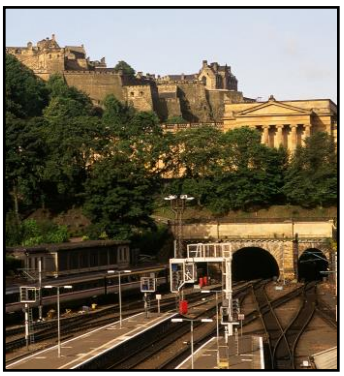
DCU390-M/S - Logger
Asset Condition Monitoring Points, Track Circuits, Events

The **Findlay Irvine** Data Collection Unit **DCU390-M** is a data logger for use in Remote Condition Monitoring applications for track assets.

The **DCU390-M** has been designed to meet and exceed Network Rails current data logger standard (NR/L2/SIF/30036). The unit is fully compatible with Network Rail's data logger standard (NR/L2/SIG/30036) and Intelligent Infrastructure Remote Condition Monitoring system (II-RCM-Interface-Spec).

- The **DCU390-M** can handle numerous applications concurrently including: Insulation, Point machine, Event and Track circuit monitoring
- The **DCU390-M** has 6 analogue and 16 digital inputs, expandable via slave units. An ambient temperature sensor is included.
- The **DCU390-S** standard slave unit has 6 analogue and 16 digital inputs, connection to Master is via in-built optically isolated RS485, fiber-optic link, low power radio (subject to approval). Other Slave configurations are available.

- Point Movement trace capture is either auto triggered from trace input or digital inputs. Time synchronization is through Network Servers or GPS receiver.
- Communication options are GPRS, Ethernet (FTN), fiber-optic, WiFi.
- Inbuilt colour touch screen display indicators, input status, configuration and local diagnoses.
- Modules are robust and compact occupying a single Miniature Relay space with same fixing and can be replaced without rewiring.



- Capable of local data processing/analysis, remotely upgradeable.
- Configuration can be created and stored independently of the DCU via configuration software. Configuration can then be uploaded remotely or automatically via memory card. Allowing easy reconfiguration of replacement units.

FINDLAY IRVINE

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DCU390-M/S Specification

DCU390-M	**Master Unit**
Supply voltage:	110Vac
Supply current:	0.8A at 110Vac RMS
Battery backup supply:	Li-ion rechargeable, minimum 20 minutes operation
Operating Temperature:	-25 to +60°C
Electrical Isolation:	>4Mohm measured at 250Vdc to Earth.
Dimensions:	138 x 56 x 179mm (HxWxD) approx.,
Form and fittings:	Compatible with the space and fixing envelope of standard BR Miniature Relay
Weight:	2Kg
Memory:	64-256MB 266MHZ DDR SDRAM 128Mbytes - 1Gbytes Flash Disk
Inputs/Outputs:	6 analogue inputs, voltage or 4-20mA 16 isolated digital inputs, event monitored
Analogue Sample Rate:	Up to 1kHz per channel
Clock:	Battery backed Real time clock
Communications:	RS485 connection to slave units/sensors RS232 connection other sensors/equipment RS232 connection to GPRS modem (see below)
Data Memory:	Two SD Memory cards, one (easily) removable
Ethernet:	Fully compliant with IEEE 802.3/802.3u standards Integrated Ethernet MAC and PHY 10BASE-T and 100BASE-TX support
Controls and Indicators:	QVGA Colour touch screen LCD (DCU390mr only) Status Leds
GPRS Modem	GPRS Class 10, PBCCH support, Coding Schemes: CS1 to CS4, Embedded TCP/IP Stack

DCU390-S	**Slave Unit**
Supply voltage:	110Vac or 24V from DCU390-M
Supply current:	0.8A at 110Vac RMS
Battery backup supply:	Li-ion rechargeable, minimum 20 minutes operation
Operating Temperature:	-25 to +70°C
Electrical Isolation:	>4Mohm measured at 250Vdc to Earth.
Dimensions:	138 x 56 x 179mm (HxWxD) approx.,
Form and fittings	Compatible with the space and fixing envelope of standard BR Miniature Relay
Weight:	1.8Kg
Memory:	64-256MB 266MHZ DDR SDRAM 128Mbytes - 1Gbytes Flash Disk
Inputs/Outputs:	6 analogue inputs, voltage or 4-20mA 16 isolated digital inputs, event monitored
Analogue Sample Rate:	Up to 1kHz per channel
Communications:	RS485 connection to slave DCU390-M
Indicators:	Status Leds

DCUView **Remote display software**

DCUView is a software package, which allows remote access to the logger to extract data, reprogram, and update configurations.

DCUConfig **DCU configuration software**

DCUConfig is a software package allowing a configuration file to be created for a DCU Master or Slave Unit. This configuration file can then be uploaded to the Master or Slave unit either locally via a USB memory stick or remotely via FTP or DCUView. The configuration includes the Input Output map and also which asset types are being monitored. This allows replacement units to be easily re configured.

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